

<110> INCYTE CORPORATION; CHAWLA, Narinder K.;
TANG, Y. Tom Tang; GRIFFIN, Jennifer A.;
YANG, Yonghong G.; RAMKUMAR, Jayalaxmi;
KHARE, Reena; RICHARDSON, Thomas W.;
BECHA, Shanya D.; TRAN, Uyen K.;
KABLE, Amy E.; SWARNAKAR, Anita;
WARREN, Bridget A.; ELLIOTT, Vicki S.;
MARQUIS, Joseph P.; HAFALIA, April J.A.

<120> CARBOHYDRATE-ASSOCIATED PROTEINS

<130> PF-1612 PCT

<140> To Be Assigned

<141> Herewith

<150> US 60/425,423

<151> 2002-11-12

<150> US 60/441,847

<151> 2003-01-21

<150> US 60/453,882

<151> 2003-03-10

<150> US 60/456,645

<151> 2003-03-20

<150> US 60/463,676

<151> 2003-04-16

<160> 40

<170> PERL Program

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<211> 108

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 7521032CD1

<400> 1

| | | | | | | | | | | | | | | |
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| Met | Ser | Leu | Phe | Pro | Ser | Leu | Pro | Leu | Leu | Leu | Ser | Met | Val | |
| 1 | | | | 5 | | | | | 10 | | | | 15 | |
| Ala | Ala | Ser | Tyr | Ser | Glu | Thr | Val | Thr | Cys | Glu | Asp | Ala | Gln | Lys |
| | | | | 20 | | | | | 25 | | | | 30 | |
| Thr | Cys | Pro | Ala | Val | Ile | Ala | Cys | Ser | Ser | Pro | Gly | Ile | Asn | Gly |
| | | | | 35 | | | | | 40 | | | | 45 | |
| Phe | Pro | Gly | Lys | Asp | Gly | Arg | Asp | Gly | Thr | Lys | Gly | Glu | Lys | Gly |
| | | | | 50 | | | | | 55 | | | | 60 | |
| Glu | Pro | Gly | Gln | Gly | Leu | Arg | Gly | Leu | Gln | Gly | Pro | Pro | Gly | Lys |
| | | | | 65 | | | | | 70 | | | | 75 | |
| Leu | Gly | Pro | Pro | Gly | Asn | Pro | Gly | Pro | Ser | Gly | Ser | Pro | Gly | Pro |
| | | | | 80 | | | | | 85 | | | | 90 | |
| Lys | Gly | Gln | Lys | Gly | Asp | Pro | Gly | Lys | Ser | Pro | Gly | Lys | Asp | Pro |
| | | | | 95 | | | | | 100 | | | | 105 | |
| Ser | Lys | Val | | | | | | | | | | | | |

<210> 2

<211> 622

<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 2936048CD1

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1 5 10 15
Ala Pro Tyr His Thr Gly Asp Pro Gln Leu Asp Thr Ala Ile Gly
20 25 30
Gln Trp Leu Arg Trp Asp Lys Asn Pro Lys Thr Lys Glu Gln Ile
35 40 45
Glu Asn Leu Leu Arg Asn Gly Met Asn Lys Glu Leu Arg Asp Arg
50 55 60
Leu Cys Cys Arg Met Thr Phe Gly Thr Ala Gly Leu Arg Ser Ala
65 70 75
Met Gly Ala Gly Phe Cys Tyr Ile Asn Asp Leu Thr Val Ile Gln
80 85 90
Ser Thr Gln Gly Met Tyr Lys Tyr Leu Glu Arg Cys Phe Ser Asp
95 100 105
Phe Lys Gln Arg Gly Phe Val Val Gly Tyr Asp Thr Arg Gly Gln
110 115 120
Val Thr Ser Ser Cys Ser Ser Gln Arg Leu Ala Lys Leu Thr Ala
125 130 135
Ala Val Leu Leu Ala Lys Asp Val Pro Val Tyr Leu Phe Ser Arg
140 145 150
Tyr Val Pro Thr Pro Phe Val Pro Tyr Ala Val Gln Lys Leu Lys
155 160 165
Ala Val Ala Gly Val Met Ile Thr Ala Ser His Asn Arg Lys Glu
170 175 180
Asp Asn Gly Tyr Lys Val Tyr Trp Glu Thr Gly Ala Gln Ile Thr
185 190 195
Ser Pro His Asp Lys Glu Ile Leu Lys Cys Ile Glu Glu Cys Val
200 205 210
Glu Pro Trp Asn Gly Ser Trp Asn Asp Asn Leu Val Asp Thr Ser
215 220 225
Pro Leu Lys Arg Asp Pro Leu Gln Asp Ile Cys Arg Arg Tyr Met
230 235 240
Glu Asp Leu Lys Lys Ile Cys Phe Tyr Arg Glu Leu Asn Ser Lys
245 250 255
Thr Thr Leu Lys Phe Val His Thr Ser Phe His Gly Val Gly His
260 265 270
Asp Tyr Val Gln Leu Ala Phe Lys Val Phe Gly Phe Lys Pro Pro
275 280 285
Ile Pro Val Pro Glu Gln Lys Asp Pro Asp Pro Asp Phe Ser Thr
290 295 300
Val Lys Cys Pro Asn Pro Glu Glu Gly Glu Ser Val Leu Glu Leu
305 310 315
Ser Leu Arg Leu Ala Glu Lys Glu Asn Ala Arg Val Val Leu Ala
320 325 330
Thr Asp Pro Asp Ala Asp Arg Leu Ala Ala Ala Glu Leu Gln Glu
335 340 345
Asn Gly Cys Trp Lys Val Phe Thr Gly Asn Glu Leu Ala Ala Leu
350 355 360
Phe Gly Trp Trp Met Phe Asp Cys Trp Lys Lys Asn Lys Ser Arg
365 370 375
Asn Ala Asp Val Lys Asn Val Tyr Met Leu Ala Thr Thr Val Ser
380 385 390
Ser Lys Ile Leu Lys Ala Ile Ala Leu Lys Glu Gly Phe His Phe
395 400 405
Glu Glu Thr Leu Pro Gly Phe Lys Trp Ile Gly Ser Arg Ile Ile

| | | |
|-------------------------------------|-------------------------|-----|
| 410 | 415 | 420 |
| Asp Leu Leu Glu Asn Gly Lys Glu Val | Leu Phe Ala Phe Glu Glu | |
| 425 | 430 | 435 |
| Ser Ile Gly Phe Leu Cys Gly Thr Ser | Val Leu Asp Lys Asp Gly | |
| 440 | 445 | 450 |
| Val Ser Ala Ala Val Val Val Ala Glu | Met Ala Ser Tyr Leu Glu | |
| 455 | 460 | 465 |
| Thr Met Asn Ile Thr Leu Lys Gln Gln | Leu Val Lys Val Tyr Glu | |
| 470 | 475 | 480 |
| Lys Tyr Gly Tyr His Ile Ser Lys Thr | Ser Tyr Phe Leu Cys Tyr | |
| 485 | 490 | 495 |
| Glu Pro Pro Thr Ile Lys Ser Ile Phe | Glu Arg Leu Arg Asn Phe | |
| 500 | 505 | 510 |
| Asp Ser Pro Lys Glu Tyr Pro Lys Phe | Cys Gly Thr Phe Ala Ile | |
| 515 | 520 | 525 |
| Leu His Val Arg Asp Ile Thr Thr Gly | Tyr Asp Ser Ser Gln Pro | |
| 530 | 535 | 540 |
| Asn Lys Lys Ser Val Leu Pro Val Ser | Lys Asn Ser Gln Met Ile | |
| 545 | 550 | 555 |
| Thr Phe Thr Phe Gln Asn Gly Cys Val | Ala Thr Leu Arg Thr Ser | |
| 560 | 565 | 570 |
| Gly Thr Glu Pro Lys Ile Lys Tyr Tyr | Ala Glu Met Cys Ala Ser | |
| 575 | 580 | 585 |
| Pro Asp Gln Ser Asp Thr Ala Leu Leu | Glu Glu Glu Leu Lys Lys | |
| 590 | 595 | 600 |
| Leu Ile Asp Ala Leu Ile Glu Asn Phe | Leu Gln Pro Ser Lys Asn | |
| 605 | 610 | 615 |
| Gly Leu Ile Trp Arg Ser Val | | |
| 620 | | |

<210> 3

<211> 210

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 7521726CD1

<400> 3

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| Met Ala Gly Cys Val | Pro Leu Leu Gln Gly | Leu Val Leu Val Leu |
| 1 | 5 | 10 |
| Ala Leu His Arg Val | Glu Pro Ser Val Phe | Leu Pro Ala Ser Lys |
| 20 | 25 | 30 |
| Ala Asn Asp Val Leu | Val Arg Trp Lys Arg | Ala Gly Ser Tyr Leu |
| 35 | 40 | 45 |
| Leu Glu Glu Leu Phe | Glu Gly Asn Leu Glu | Lys Glu Cys Tyr Glu |
| 50 | 55 | 60 |
| Glu Thr Cys Val Tyr | Glu Glu Ala Arg Glu | Val Phe Glu Asn Glu |
| 65 | 70 | 75 |
| Val Val Thr Asp Glu | Phe Trp Arg Arg Tyr | Lys Gly Gly Ser Pro |
| 80 | 85 | 90 |
| Cys Ile Ser Gln Pro | Cys Leu His Asn Gly | Ser Cys Gln Asp Ser |
| 95 | 100 | 105 |
| Ile Trp Gly Tyr Thr | Cys Thr Cys Ser Pro | Gly Tyr Glu Gly Ser |
| 110 | 115 | 120 |
| Asn Cys Glu Leu Ala | Lys Asn Glu Cys His | Pro Glu Arg Thr Asp |
| 125 | 130 | 135 |
| Gly Cys Gln His Phe | Cys Leu Pro Gly Gln | Glu Ser Tyr Thr Cys |
| 140 | 145 | 150 |
| Ser Cys Ala Gln Gly | Tyr Arg Leu Gly Glu | Asp His Lys Gln Cys |
| 155 | 160 | 165 |
| Val Pro His Asp Gln | Cys Ala Cys Gly Val | Leu Thr Ser Glu Lys |

| | | | | | |
|-----------------|-------------------------|---------------------|-----|--|-----|
| | 170 | | 175 | | 180 |
| Arg Ala Pro Asp | Leu Gln Asp Leu Pro Trp | Gln Asn Glu Pro Arg | | | |
| | 185 | | 190 | | 195 |
| Pro Ala Asp Asp | Gln Asp Asn Ala Arg Pro | Cys Ala His Ala Val | | | |
| | 200 | | 205 | | 210 |

<210> 4
 <211> 248
 <212> PRT
 <213> Homo sapiens

<220>
 <221> misc_feature
 <223> Incyte ID No: 7523383CD1

<400> 4

| | | | |
|---------------------|---------------------|---------------------|-----|
| Met Ala Lys Asp Phe | Gln Asp Ile Gln Gln | Leu Ser Ser Glu Glu | |
| 1 | 5 | 10 | 15 |
| Asn Asp His Pro Phe | His Gln Gly Ala Gln | Leu Gln Ala Glu Leu | |
| | 20 | 25 | 30 |
| Arg Ser Leu Lys Glu | Ala Phe Ser Asn Phe | Ser Ser Ser Thr Leu | |
| | 35 | 40 | 45 |
| Thr Glu Val Gln Ala | Ile Ser Thr His Gly | Gly Ser Val Gly Asp | |
| | 50 | 55 | 60 |
| Lys Ile Thr Ser Leu | Gly Ala Lys Leu Glu | Lys Gln Gln Gln Asp | |
| | 65 | 70 | 75 |
| Leu Lys Ala Asp His | Asp Ala Leu Leu Phe | His Leu Lys His Phe | |
| | 80 | 85 | 90 |
| Pro Val Asp Leu Arg | Phe Val Ala Cys Gln | Met Glu Leu Leu His | |
| | 95 | 100 | 105 |
| Ser Asn Gly Ser Gln | Arg Thr Cys Cys Pro | Val Asn Trp Val Glu | |
| | 110 | 115 | 120 |
| His Gln Gly Ser Cys | Tyr Trp Phe Ser His | Ser Gly Lys Ala Trp | |
| | 125 | 130 | 135 |
| Ala Glu Ala Glu Lys | Tyr Cys Gln Leu Glu | Asn Ala His Leu Val | |
| | 140 | 145 | 150 |
| Val Ile Asn Ser Trp | Glu Glu Gln Lys Phe | Ile Val Gln His Thr | |
| | 155 | 160 | 165 |
| Asn Pro Phe Asn Thr | Trp Ile Gly Leu Thr | Asp Ser Asp Gly Ser | |
| | 170 | 175 | 180 |
| Trp Lys Trp Val Asp | Gly Thr Asp Tyr Arg | His Asn Tyr Lys Asn | |
| | 185 | 190 | 195 |
| Trp Ala Val Thr Gln | Pro Asp Asn Trp His | Gly His Glu Leu Gly | |
| | 200 | 205 | 210 |
| Gly Ser Glu Asp Cys | Val Glu Val Gln Pro | Asp Gly Arg Trp Asn | |
| | 215 | 220 | 225 |
| Asp Asp Phe Cys Leu | Gln Val Tyr Arg Trp | Val Cys Gly Lys Arg | |
| | 230 | 235 | 240 |
| Arg Asn Ala Thr Gly | Glu Val Ala | | |
| | 245 | | |

<210> 5
 <211> 97
 <212> PRT
 <213> Homo sapiens

<220>
 <221> misc_feature
 <223> Incyte ID No: 7522027CD1

<400> 5
 Met Ala Gly Cys Val Pro Leu Leu Gln Gly Leu Val Leu Val Leu

| | | | |
|---|----|----|----|
| 1 | 5 | 10 | 15 |
| Ala Leu His Arg Val Glu Pro Ser Val Phe Leu Pro Ala Ser Lys | 20 | 25 | 30 |
| Ala Asn Asp Val Leu Val Arg Trp Lys Arg Ala Gly Ser Tyr Leu | 35 | 40 | 45 |
| Leu Glu Glu Leu Phe Glu Gly Asn Leu Glu Lys Glu Cys Tyr Glu | 50 | 55 | 60 |
| Glu Ile Cys Val Tyr Glu Glu Ala Arg Glu Val Phe Glu Asn Glu | 65 | 70 | 75 |
| Val Val Thr Asp Glu Phe Trp Arg Arg Tyr Lys Gly Lys Trp Phe | 80 | 85 | 90 |
| Pro Ser Ser Pro Gln Lys Tyr | 95 | | |

<210> 6
 <211> 479
 <212> PRT
 <213> Homo sapiens

<220>
 <221> misc_feature
 <223> Incyte ID No: 7524406CD1

<400> 6

| | | | | |
|---|-----|-----|-----|----|
| Met Gly Arg Ile Gly Ile Ser Cys Leu Phe Pro Ala Ser Trp His | 1 | 5 | 10 | 15 |
| Phe Ser Ile Ser Pro Val Gly Cys Pro Arg Ile Leu Asn Thr Asn | 20 | 25 | 30 | |
| Leu Arg Gln Ile Met Val Ile Ser Val Leu Ala Ala Ala Val Ser | 35 | 40 | 45 | |
| Leu Leu Tyr Phe Ser Val Val Ile Ile Arg Asn Lys Tyr Gly Arg | 50 | 55 | 60 | |
| Leu Thr Arg Asp Lys Lys Phe Gln Arg Tyr Leu Ala Arg Val Thr | 65 | 70 | 75 | |
| Asp Ile Glu Ala Thr Asp Thr Asn Asn Pro Asn Val Ser Tyr Gly | 80 | 85 | 90 | |
| Ile Val Val Asp Cys Gly Ser Ser Gly Ser Arg Val Phe Val Tyr | 95 | 100 | 105 | |
| Cys Trp Pro Arg His Asn Gly Asn Pro His Asp Leu Leu Asp Ile | 110 | 115 | 120 | |
| Arg Gln Met Arg Asp Lys Asn Arg Lys Pro Val Val Met Lys Ile | 125 | 130 | 135 | |
| Lys Pro Gly Ile Ser Glu Phe Ala Thr Ser Pro Glu Lys Val Ser | 140 | 145 | 150 | |
| Asp Tyr Ile Ser Pro Leu Leu Asn Phe Ala Ala Glu His Val Pro | 155 | 160 | 165 | |
| Arg Ala Lys His Lys Glu Thr Pro Leu Tyr Ile Leu Cys Thr Ala | 170 | 175 | 180 | |
| Gly Met Arg Ile Leu Pro Glu Ser Gln Lys Ala Ile Leu Glu | 185 | 190 | 195 | |
| Asp Leu Leu Thr Asp Ile Pro Val His Phe Asp Phe Leu Phe Ser | 200 | 205 | 210 | |
| Asp Ser His Ala Glu Val Ile Ser Gly Lys Gln Glu Gly Val Tyr | 215 | 220 | 225 | |
| Ala Trp Ile Gly Ile Asn Phe Val Leu Gly Arg Phe Glu His Ile | 230 | 235 | 240 | |
| Glu Asp Asp Asp Glu Ala Val Val Glu Val Asn Ile Pro Gly Ser | 245 | 250 | 255 | |
| Glu Ser Ser Glu Ala Ile Val Arg Lys Arg Thr Ala Gly Ile Leu | 260 | 265 | 270 | |
| Asp Met Gly Gly Val Ser Thr Gln Ile Ala Tyr Glu Val Pro Lys | 275 | 280 | 285 | |
| Thr Glu Glu Val Ala Lys Asn Leu Leu Ala Glu Phe Asn Leu Gly | | | | |

| | | | | | |
|-----------------|-----|---------------------|-----|---------------------|-----|
| Cys Asp Val His | 290 | Gln Thr Glu His Val | 295 | Tyr Arg Val Tyr Val | 300 |
| Thr Phe Leu Gly | 305 | Phe Gly Gly Asn Ala | 310 | Ala Arg Gln Arg Tyr | 315 |
| Asp Arg Ile Phe | 320 | Ala Asn Thr Ile Gln | 325 | Lys Asn Arg Leu Leu | 330 |
| Lys Gln Thr Gly | 335 | Leu Thr Pro Asp Met | 340 | Pro Tyr Leu Asp Pro | 345 |
| Leu Pro Leu Asp | 350 | Ile Lys Asp Glu Ile | 355 | Gln Gln Asn Gly Gln | 360 |
| Ile Tyr Leu Arg | 365 | Gly Thr Gly Asp Phe | 370 | Asp Leu Cys Arg Glu | 375 |
| Ile Gln Pro Phe | 380 | Met Asn Lys Thr Asn | 385 | Glu Thr Gln Thr Ser | 390 |
| Asn Gly Val Tyr | 395 | Gln Pro Pro Ile His | 400 | Phe Gln Asn Ser Glu | 405 |
| Tyr Gly Phe Ser | 410 | Glu Phe Tyr Tyr Cys | 415 | Thr Glu Asp Val Leu | 420 |
| Met Gly Gly Asp | 425 | Tyr Asn Ala Ala Lys | 430 | Phe Thr Lys Ala Ala | 435 |
| Asp Tyr Cys Ala | 440 | Thr Lys Trp Ser Ile | 445 | Leu Arg Glu Arg Phe | 450 |
| Arg Gly Leu Tyr | 455 | Ala Ser His Ala Asp | 460 | Leu His Arg Leu Lys | 465 |
| | 470 | | 475 | | |

<210> 7

<211> 222

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 7524922CD1

<400> 7

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| Met Ser Asp Ser Lys | 5 | Glu Pro Arg Val | 10 | Gln Gln Leu Gly Leu Leu | 15 |
| Val Ser Lys Val Pro | 20 | Ser Ser Leu Ser | 25 | Gln Glu Gln Ser Glu Gln | 30 |
| Asp Ala Ile Tyr Gln | 35 | Asn Leu Thr Gln | 40 | Leu Lys Ala Ala Val Gly | 45 |
| Glu Leu Ser Glu Lys | 50 | Ser Lys Leu Gln | 55 | Glu Ile Tyr Gln Glu Leu | 60 |
| Thr Gln Leu Lys Ala | 65 | Ala Val Gly Glu | 70 | Leu Pro Glu Lys Ser Lys | 75 |
| Leu Gln Glu Ile Tyr | 80 | Gln Glu Leu Thr | 85 | Arg Leu Lys Ala Ala Val | 90 |
| Gly Glu Leu Pro Glu | 95 | Lys Ser Lys Leu | 100 | Gln Glu Ile Tyr Gln Glu | 105 |
| Leu Thr Arg Leu Lys | 110 | Ala Ala Val Gly | 115 | Glu Leu Pro Glu Lys Ser | 120 |
| Lys Leu Gln Glu Ile | 125 | Tyr Gln Glu Leu | 130 | Gln Leu Lys Ala Ala | 135 |
| Val Gly Glu Leu Pro | 140 | Asp Gln Ser Lys | 145 | Gln Gln Gln Ile Tyr Gln | 150 |
| Glu Leu Thr Asp Leu | 155 | Lys Thr Ala Phe | 160 | Glu Arg Leu Cys Arg His | 165 |
| Cys Pro Lys Asp Trp | 170 | Thr Phe Phe Gln | 175 | Gly Asn Cys Tyr Phe Met | 180 |
| Ser Asn Ser Gln Arg | 185 | Asn Trp His Asn | 190 | Ser Val Thr Ala Cys Gln | 195 |
| Glu Val Arg Ala Gln | | Leu Val Val Ile | | Lys Thr Ala Glu Glu Gln | |

| | | | | | |
|-----------------|---------------------|-------------|-----|--|-----|
| | 200 | | 205 | | 210 |
| Leu Pro Ala Val | Leu Glu Gln Trp Arg | Thr Gln Gln | | | |
| | 215 | | 220 | | |

<210> 8
 <211> 370
 <212> PRT
 <213> Homo sapiens

<220>
 <221> misc_feature
 <223> Incyte ID No: 7524936CD1

<400> 8

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|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Ser | Asp | Ser | Lys | Glu | Pro | Arg | Val | Gln | Gln | Leu | Gly | Leu | Leu |
| 1 | | | | 5 | | | | | 10 | | | | | 15 |
| Glu | Asp | Pro | Thr | Thr | Ser | Gly | Ile | Arg | Leu | Phe | Pro | Arg | Asp | Phe |
| | | | | 20 | | | | | 25 | | | | | 30 |
| Gln | Phe | Gln | Gln | Ile | His | Gly | His | Lys | Ser | Ser | Thr | Val | Ser | Lys |
| | | | | 35 | | | | | 40 | | | | | 45 |
| Val | Pro | Ser | Ser | Leu | Ser | Gln | Glu | Gln | Ser | Glu | Gln | Asp | Ala | Ile |
| | | | | 50 | | | | | 55 | | | | | 60 |
| Tyr | Gln | Asn | Leu | Thr | Gln | Leu | Lys | Ala | Ala | Val | Gly | Glu | Leu | Ser |
| | | | | 65 | | | | | 70 | | | | | 75 |
| Glu | Lys | Ser | Lys | Leu | Gln | Glu | Ile | Tyr | Gln | Glu | Leu | Thr | Gln | Leu |
| | | | | 80 | | | | | 85 | | | | | 90 |
| Lys | Ala | Ala | Val | Gly | Glu | Leu | Pro | Glu | Lys | Ser | Lys | Leu | Gln | Glu |
| | | | | 95 | | | | | 100 | | | | | 105 |
| Ile | Tyr | Gln | Glu | Leu | Thr | Arg | Leu | Lys | Ala | Ala | Val | Gly | Glu | Leu |
| | | | | 110 | | | | | 115 | | | | | 120 |
| Pro | Glu | Lys | Ser | Lys | Leu | Gln | Glu | Ile | Tyr | Gln | Glu | Leu | Thr | Arg |
| | | | | 125 | | | | | 130 | | | | | 135 |
| Leu | Lys | Ala | Ala | Val | Gly | Glu | Leu | Pro | Glu | Lys | Ser | Lys | Leu | Gln |
| | | | | 140 | | | | | 145 | | | | | 150 |
| Glu | Ile | Tyr | Gln | Glu | Leu | Thr | Arg | Leu | Lys | Ala | Ala | Val | Gly | Glu |
| | | | | 155 | | | | | 160 | | | | | 165 |
| Leu | Pro | Glu | Lys | Ser | Lys | Leu | Gln | Glu | Ile | Tyr | Gln | Glu | Leu | Thr |
| | | | | 170 | | | | | 175 | | | | | 180 |
| Glu | Leu | Lys | Ala | Ala | Val | Gly | Glu | Leu | Pro | Glu | Lys | Ser | Lys | Leu |
| | | | | 185 | | | | | 190 | | | | | 195 |
| Gln | Glu | Ile | Tyr | Gln | Glu | Leu | Thr | Gln | Leu | Lys | Ala | Ala | Val | Gly |
| | | | | 200 | | | | | 205 | | | | | 210 |
| Glu | Leu | Pro | Asp | Gln | Ser | Lys | Gln | Gln | Gln | Ile | Tyr | Gln | Glu | Leu |
| | | | | 215 | | | | | 220 | | | | | 225 |
| Thr | Asp | Leu | Lys | Thr | Ala | Phe | Glu | Arg | Leu | Cys | Arg | His | Cys | Pro |
| | | | | 230 | | | | | 235 | | | | | 240 |
| Lys | Asp | Trp | Thr | Phe | Phe | Gln | Gly | Asn | Cys | Tyr | Phe | Met | Ser | Asn |
| | | | | 245 | | | | | 250 | | | | | 255 |
| Ser | Gln | Arg | Asn | Trp | His | Asp | Ser | Val | Thr | Ala | Cys | Gln | Glu | Val |
| | | | | 260 | | | | | 265 | | | | | 270 |
| Arg | Ala | Gln | Leu | Val | Val | Ile | Lys | Thr | Ala | Glu | Glu | Gln | Asn | Phe |
| | | | | 275 | | | | | 280 | | | | | 285 |
| Leu | Gln | Leu | Gln | Thr | Ser | Arg | Ser | Asn | Arg | Phe | Ser | Trp | Met | Gly |
| | | | | 290 | | | | | 295 | | | | | 300 |
| Leu | Ser | Asp | Leu | Asn | Gln | Glu | Gly | Thr | Trp | Gln | Trp | Val | Asp | Gly |
| | | | | 305 | | | | | 310 | | | | | 315 |
| Ser | Pro | Leu | Ser | Pro | Ser | Phe | Gln | Arg | Tyr | Trp | Asn | Ser | Gly | Glu |
| | | | | 320 | | | | | 325 | | | | | 330 |
| Pro | Asn | Asn | Ser | Gly | Asn | Glu | Asp | Cys | Ala | Glu | Phe | Ser | Gly | Ser |
| | | | | 335 | | | | | 340 | | | | | 345 |
| Gly | Trp | Asn | Asp | Asn | Arg | Cys | Asp | Val | Asp | Asn | Tyr | Trp | Ile | Cys |
| | | | | 350 | | | | | 355 | | | | | 360 |
| Lys | Lys | Pro | Ala | Pro | Arg | Phe | Arg | Asp | Glu | | | | | |

365

370

<210> 9
 <211> 77
 <212> PRT
 <213> Homo sapiens

<220>
 <221> misc_feature
 <223> Incyte ID No: 7512039CD1

<400> 9
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 1 5 10 15
 Cys Phe Ser Ser Gln Met Phe Leu Trp Thr Val Ala Gly Ile Pro
 20 25 30
 Ile Leu Phe Leu Ser Ala Cys Phe Ile Thr Arg Cys Val Val Thr
 35 40 45
 Phe Arg Ile Phe Gln Thr Cys Asp Glu Lys Lys Phe Gln Leu Pro
 50 55 60
 Glu Asn Phe Thr Glu Leu Ser Cys Tyr Asn Tyr Gly Ser Ala Ser
 65 70 75
 Gly Met

<210> 10
 <211> 415
 <212> PRT
 <213> Homo sapiens

<220>
 <221> misc_feature
 <223> Incyte ID No: 7512576CD1

<400> 10
 Met Pro Ala Val Ser Gly Pro Gly Pro Leu Phe Cys Leu Leu Leu
 1 5 10 15
 Leu Leu Leu Asp Pro His Ser Pro Glu Thr Gly Cys Pro Pro Leu
 20 25 30
 Arg Arg Phe Glu Tyr Lys Leu Ser Phe Lys Gly Pro Arg Leu Ala
 35 40 45
 Leu Pro Gly Ala Gly Ile Pro Phe Trp Ser His His Gly Asp Ala
 50 55 60
 Ile Leu Gly Leu Glu Glu Val Arg Leu Thr Pro Ser Met Arg Asn
 65 70 75
 Arg Ser Gly Ala Val Trp Ser Arg Ala Ser Val Pro Phe Ser Ala
 80 85 90
 Trp Glu Val Glu Val Gln Met Arg Val Thr Gly Leu Gly Arg Arg
 95 100 105
 Gly Ala Gln Gly Met Ala Val Trp Tyr Thr Arg Gly Arg Gly His
 110 115 120
 Val Gly Ser Val Leu Gly Gly Leu Ala Ser Trp Asp Gly Ile Gly
 125 130 135
 Ile Phe Phe Asp Ser Pro Ala Glu Asp Thr Gln Asp Ser Pro Ala
 140 145 150
 Ile Arg Val Leu Ala Ser Asp Gly His Ile Pro Ser Glu Gln Pro
 155 160 165
 Gly Asp Gly Ala Ser Gln Gly Leu Gly Ser Cys His Trp Asp Phe
 170 175 180
 Arg Asn Arg Pro His Pro Phe Arg Ala Arg Ile Thr Tyr Trp Gly
 185 190 195
 Gln Arg Leu Arg Met Ser Leu Asn Ser Gly Leu Thr Pro Ser Asp
 200 205 210

| | | | | |
|-------------------------------------|-------------------------|-----|-----|-----|
| Pro Asp Asp His Asp Val Leu Ser Phe | Leu Thr Phe Ser Leu Ser | 215 | 220 | 225 |
| Glu Pro Ser Pro Glu Val Pro Pro Gln | Pro Phe Leu Glu Met Gln | 230 | 235 | 240 |
| Gln Leu Arg Leu Ala Arg Gln Leu Glu | Gly Leu Trp Ala Arg Leu | 245 | 250 | 255 |
| Gly Leu Gly Thr Arg Glu Asp Val Thr | Pro Lys Ser Asp Ser Glu | 260 | 265 | 270 |
| Ala Gln Gly Glu Gly Glu Arg Leu Phe | Asp Leu Glu Glu Thr Leu | 275 | 280 | 285 |
| Gly Arg His Arg Arg Ile Leu Gln Ala | Leu Arg Gly Leu Ser Lys | 290 | 295 | 300 |
| Gln Leu Ala Gln Ala Glu Arg Gln Trp | Lys Lys Gln Leu Gly Pro | 305 | 310 | 315 |
| Pro Gly Gln Ala Arg Pro Asp Gly Gly | Trp Ala Leu Asp Ala Ser | 320 | 325 | 330 |
| Cys Gln Ile Pro Ser Thr Pro Gly Arg | Gly Gly His Leu Ser Met | 335 | 340 | 345 |
| Ser Leu Asn Lys Asp Ser Ala Lys Val | Gly Ala Leu Leu His Gly | 350 | 355 | 360 |
| Gln Trp Thr Leu Leu Gln Ala Leu Gln | Glu Met Ser Arg Gln Glu | 365 | 370 | 375 |
| Leu Asn Lys Ser Leu Gln Glu Cys Leu | Ser Thr Gly Ser Leu Pro | 380 | 385 | 390 |
| Leu Gly Pro Ala Pro His Thr Pro Arg | Ala Leu Gly Ile Leu Met | 395 | 400 | 405 |
| Arg Gln Pro Leu Pro Ala Ser Met Pro | Ala | 410 | 415 | |

<210> 11
 <211> 441
 <212> PRT
 <213> Homo sapiens

<220>
 <221> misc_feature
 <223> Incyte ID No: 7514864CD1

| | |
|---|-------------|
| <400> 11 | |
| Met Ala Ala Ala Met Pro Leu Ala Leu Leu Val Leu Leu Leu Leu | 1 5 10 15 |
| Gly Pro Gly Gly Trp Cys Leu Ala Glu Pro Pro Arg Asp Ser Leu | 20 25 30 |
| Arg Glu Glu Leu Val Ile Thr Pro Leu Pro Ser Gly Asp Val Ala | 35 40 45 |
| Ala Thr Phe Gln Phe Arg Thr Arg Trp Asp Ser Glu Leu Gln Arg | 50 55 60 |
| Glu Gly Gly Leu Ser Val Leu Leu Lys Ala Asp Arg Leu Phe His | 65 70 75 |
| Thr Ser Tyr His Ser Gln Ala Val His Ile Arg Pro Val Cys Arg | 80 85 90 |
| Asn Ala Arg Cys Thr Ser Ile Ser Trp Glu Leu Arg Gln Thr Leu | 95 100 105 |
| Ser Val Val Phe Asp Ala Phe Ile Ala Gly Gln Gly Lys Lys Asp | 110 115 120 |
| Trp Ser Leu Phe Arg Met Phe Ser Arg Thr Leu Thr Glu Pro Cys | 125 130 135 |
| Pro Leu Ala Ser Glu Ser Arg Val Tyr Val Asp Ile Thr Thr Tyr | 140 145 150 |
| Asn Gln Asp Asn Glu Thr Leu Glu Val His Pro Pro Pro Thr Thr | 155 160 165 |
| Thr Tyr Gln Asp Val Ile Leu Gly Thr Arg Lys Thr Tyr Ala Ile | 170 175 180 |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| Tyr | Asp | Leu | Leu | Asp | Thr | Ala | Met | Ile | Asn | Asn | Ser | Arg | Asn | Leu | |
| | | | | 185 | | | | | 190 | | | | | 195 | |
| Asn | Ile | Gln | Leu | Lys | Trp | Lys | Arg | Pro | Pro | Glu | Asn | Glu | Ala | Pro | |
| | | | | 200 | | | | | 205 | | | | | 210 | |
| Pro | Val | Pro | Phe | Leu | Arg | Ala | Gln | Arg | Tyr | Val | Ser | Gly | Tyr | Gly | |
| | | | | 215 | | | | | 220 | | | | | 225 | |
| Leu | Gln | Lys | Gly | Glu | Leu | Ser | Thr | Leu | Leu | Tyr | Asn | Thr | His | Pro | |
| | | | | 230 | | | | | 235 | | | | | 240 | |
| Tyr | Arg | Ala | Phe | Pro | Val | Leu | Leu | Leu | Asp | Thr | Val | Pro | Trp | Tyr | |
| | | | | 245 | | | | | 250 | | | | | 255 | |
| Leu | Arg | Leu | Tyr | Val | His | Thr | Leu | Thr | Ile | Thr | Ser | Lys | Gly | Lys | |
| | | | | 260 | | | | | 265 | | | | | 270 | |
| Glu | Asn | Lys | Pro | Ser | Tyr | Ile | His | Tyr | Gln | Pro | Ala | Gln | Asp | Arg | |
| | | | | 275 | | | | | 280 | | | | | 285 | |
| Leu | Gln | Pro | His | Leu | Leu | Glu | Met | Leu | Ile | Gln | Leu | Pro | Ala | Asn | |
| | | | | 290 | | | | | 295 | | | | | 300 | |
| Ser | Val | Thr | Lys | Val | Ser | Ile | Gln | Phe | Glu | Arg | Ala | Leu | Leu | Lys | |
| | | | | 305 | | | | | 310 | | | | | 315 | |
| Trp | Thr | Glu | Tyr | Thr | Pro | Asp | Pro | Asn | His | Gly | Phe | Tyr | Val | Ser | |
| | | | | 320 | | | | | 325 | | | | | 330 | |
| Pro | Ser | Val | Leu | Ser | Ala | Leu | Val | Pro | Ser | Met | Val | Ala | Ala | Lys | |
| | | | | 335 | | | | | 340 | | | | | 345 | |
| Pro | Val | Asp | Trp | Glu | Glu | Ser | Pro | Leu | Phe | Asn | Ser | Leu | Phe | Pro | |
| | | | | 350 | | | | | 355 | | | | | 360 | |
| Val | Ser | Asp | Gly | Ser | Asn | Tyr | Phe | Val | Arg | Leu | Tyr | Thr | Glu | Pro | |
| | | | | 365 | | | | | 370 | | | | | 375 | |
| Leu | Leu | Val | Asn | Leu | Pro | Thr | Pro | Asp | Phe | Ser | Met | Pro | Tyr | Asn | |
| | | | | 380 | | | | | 385 | | | | | 390 | |
| Val | Ile | Cys | Leu | Thr | Cys | Thr | Val | Val | Ala | Val | Cys | Tyr | Gly | Ser | |
| | | | | 395 | | | | | 400 | | | | | 405 | |
| Phe | Tyr | Asn | Leu | Leu | Thr | Arg | Thr | Phe | His | Ile | Glu | Glu | Pro | Arg | |
| | | | | 410 | | | | | 415 | | | | | 420 | |
| Thr | Gly | Gly | Leu | Ala | Lys | Arg | Leu | Ala | Asn | Leu | Ile | Arg | Arg | Ala | |
| | | | | 425 | | | | | 430 | | | | | 435 | |
| Arg | Gly | Val | Pro | Pro | Leu | | | | | | | | | | |
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<220>
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| Met | Thr | Gln | Leu | Lys | Glu | Ala | Ala | Ile | Gly | Val | Leu | Val | Leu | Ser | |
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| Trp | Tyr | Pro | Pro | Gly | Met | Ala | Asp | Asp | Asn | Gly | Glu | Pro | Ser | Asp | |
| | | | | 20 | | | | | 25 | | | | | 30 | |
| Asp | Leu | Val | Pro | Ala | Ile | Leu | Asp | Thr | Ala | His | Gln | Tyr | Ser | Ile | |
| | | | | 35 | | | | | 40 | | | | | 45 | |
| Gln | Val | Ala | Phe | His | Ile | Gln | Pro | Tyr | Lys | Gly | Arg | Asp | Asp | Ile | |
| | | | | 50 | | | | | 55 | | | | | 60 | |
| Thr | Val | His | Asp | Asn | Ile | Lys | Tyr | Ile | Ile | Asp | Thr | Tyr | Gly | Ser | |
| | | | | 65 | | | | | 70 | | | | | 75 | |
| His | Gly | Ala | Phe | Tyr | Arg | Tyr | Lys | Asn | Ser | Met | Gly | Lys | Ser | Leu | |
| | | | | 80 | | | | | 85 | | | | | 90 | |
| Pro | Leu | Phe | Tyr | Ile | Tyr | Asp | Ser | Tyr | Leu | Thr | Ser | Pro | Glu | Ala | |
| | | | | 95 | | | | | 100 | | | | | 105 | |
| Trp | Ala | His | Leu | Leu | Thr | Pro | Asn | Gly | Pro | His | Ser | Ile | Arg | Asn | |
| | | | | 110 | | | | | 115 | | | | | 120 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| Thr | Pro | Tyr | Asp | Gly | Val | Phe | Ile | Ala | Leu | Leu | Val | Glu | Glu | Gly | |
| | | | | 125 | | | | | 130 | | | | | 135 | |
| His | Thr | His | Asp | Ile | Leu | Ala | Ala | Gly | Phe | Asp | Gly | Met | Tyr | Thr | |
| | | | | 140 | | | | | 145 | | | | | 150 | |
| Tyr | Phe | Ala | Ser | Asn | Gly | Phe | Ser | Phe | Gly | Ser | Ser | His | Gln | Asn | |
| | | | | 155 | | | | | 160 | | | | | 165 | |
| Trp | Lys | Ala | Val | Lys | Asn | Phe | Cys | Asp | Ala | Asn | Asn | Leu | Met | Phe | |
| | | | | 170 | | | | | 175 | | | | | 180 | |
| Ile | Pro | Ser | Val | Gly | Pro | Gly | Tyr | Ile | Asp | Thr | Ser | Ile | Arg | Pro | |
| | | | | 185 | | | | | 190 | | | | | 195 | |
| Trp | Asn | Asn | His | Asn | Thr | Arg | Asn | Arg | Val | Asn | Gly | Lys | Tyr | Tyr | |
| | | | | 200 | | | | | 205 | | | | | 210 | |
| Glu | Thr | Ala | Leu | Gln | Ala | Ala | Leu | Thr | Val | Arg | Pro | Glu | Ile | Val | |
| | | | | 215 | | | | | 220 | | | | | 225 | |
| Ser | Ile | Thr | Ser | Phe | Asn | Glu | Trp | His | Glu | Gly | Thr | Gln | Ile | Glu | |
| | | | | 230 | | | | | 235 | | | | | 240 | |
| Lys | Ala | Ile | Pro | Lys | Lys | Thr | Pro | Thr | Arg | Leu | Tyr | Leu | Asp | Tyr | |
| | | | | 245 | | | | | 250 | | | | | 255 | |
| Leu | Pro | His | Gln | Pro | Ser | Leu | Tyr | Leu | Glu | Leu | Thr | Arg | Arg | Trp | |
| | | | | 260 | | | | | 265 | | | | | 270 | |
| Ala | Glu | His | Phe | Ile | Lys | Glu | Lys | Glu | Gln | Trp | Leu | Met | | | |
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<210> 13
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 <212> PRT
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<220>
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| Met | Ser | Ala | Leu | Trp | Leu | Leu | Leu | Gly | Leu | Leu | Ala | Leu | Met | Gly | |
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| Val | Arg | Ala | Ser | Glu | Arg | Leu | Ala | Glu | Ile | Asp | Met | Pro | Tyr | Leu | |
| | | | | 20 | | | | | 25 | | | | | 30 | |
| Leu | Lys | Tyr | Gln | Pro | Met | Met | Gln | Thr | Ile | Gly | Gln | Lys | Tyr | Cys | |
| | | | | 35 | | | | | 40 | | | | | 45 | |
| Met | Asp | Pro | Ala | Val | Ile | Ala | Gly | Val | Leu | Ser | Arg | Lys | Ser | Pro | |
| | | | | 50 | | | | | 55 | | | | | 60 | |
| Gly | Asp | Lys | Ile | Leu | Val | Asn | Met | Gly | Asp | Arg | Thr | Ser | Met | Val | |
| | | | | 65 | | | | | 70 | | | | | 75 | |
| Gln | Asp | Pro | Gly | Ser | Gln | Ala | Pro | Thr | Ser | Trp | Ile | Ser | Glu | Ser | |
| | | | | 80 | | | | | 85 | | | | | 90 | |
| Gln | Val | Ser | Gln | Thr | Thr | Glu | Val | Leu | Thr | Thr | Arg | Ile | Lys | Glu | |
| | | | | 95 | | | | | 100 | | | | | 105 | |
| Ile | Gln | Arg | Arg | Phe | Pro | Thr | Trp | Thr | Pro | Asp | Gln | Tyr | Leu | Arg | |
| | | | | 110 | | | | | 115 | | | | | 120 | |
| Gly | Gly | Leu | Cys | Ala | Tyr | Ser | Gly | Gly | Ala | Gly | Tyr | Val | Arg | Ser | |
| | | | | 125 | | | | | 130 | | | | | 135 | |
| Ser | Gln | Asp | Leu | Ser | Cys | Asp | Phe | Cys | Asn | Asp | Val | Leu | Ala | Arg | |
| | | | | 140 | | | | | 145 | | | | | 150 | |
| Ala | Lys | Tyr | Leu | Lys | Arg | His | Gly | Phe | | | | | | | |
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<400> 14

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| Met | His | Asp | Ser | Asn | Asn | Val | Glu | Lys | Asp | Ile | Thr | Pro | Ser | Glu | |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Leu | Pro | Ala | Asn | Pro | Ala | Ile | Arg | Ala | Asn | Cys | His | Gln | Glu | Pro | |
| | | | | 20 | | | | | 25 | | | | | 30 | |
| Ser | Val | Cys | Leu | Gln | Ala | Ala | Cys | Pro | Glu | Ser | Trp | Ile | Gly | Phe | |
| | | | | 35 | | | | | 40 | | | | | 45 | |
| Gln | Arg | Lys | Cys | Phe | Tyr | Phe | Ser | Asp | Asp | Thr | Lys | Asn | Trp | Thr | |
| | | | | 50 | | | | | 55 | | | | | 60 | |
| Ser | Ser | Gln | Arg | Phe | Cys | Asp | Ser | Gln | Asp | Ala | Asp | Leu | Ala | Gln | |
| | | | | 65 | | | | | 70 | | | | | 75 | |
| Val | Glu | Ser | Phe | Gln | Glu | Leu | Asn | Phe | Leu | Leu | Arg | Tyr | Lys | Gly | |
| | | | | 80 | | | | | 85 | | | | | 90 | |
| Pro | Ser | Asp | His | Trp | Ile | Gly | Leu | Ser | Arg | Glu | Gln | Gly | Gln | Pro | |
| | | | | 95 | | | | | 100 | | | | | 105 | |
| Trp | Lys | Trp | Ile | Asn | Gly | Thr | Glu | Trp | Thr | Arg | Gln | Phe | Pro | Ile | |
| | | | | 110 | | | | | 115 | | | | | 120 | |
| Leu | Gly | Ala | Gly | Glu | Cys | Ala | Tyr | Leu | Asn | Asp | Lys | Gly | Ala | Ser | |
| | | | | 125 | | | | | 130 | | | | | 135 | |
| Ser | Ala | Arg | His | Tyr | Thr | Glu | Arg | Lys | Trp | Ile | Cys | Ser | Lys | Ser | |
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<220>

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<223> Incyte ID No: 7515114CD1

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| Met | Pro | Ala | Val | Ser | Gly | Pro | Gly | Pro | Leu | Phe | Cys | Leu | Leu | Leu | |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Leu | Leu | Leu | Asp | Pro | His | Ser | Pro | Glu | Thr | Gly | Cys | Pro | Pro | Leu | |
| | | | | 20 | | | | | 25 | | | | | 30 | |
| Arg | Arg | Phe | Glu | Tyr | Lys | Leu | Ser | Phe | Lys | Gly | Pro | Arg | Leu | Ala | |
| | | | | 35 | | | | | 40 | | | | | 45 | |
| Leu | Pro | Gly | Ala | Gly | Ile | Pro | Phe | Trp | Ser | His | His | Gly | Asp | Ala | |
| | | | | 50 | | | | | 55 | | | | | 60 | |
| Ile | Leu | Gly | Leu | Glu | Glu | Val | Arg | Leu | Thr | Pro | Ser | Met | Arg | Asn | |
| | | | | 65 | | | | | 70 | | | | | 75 | |
| Arg | Ser | Gly | Ala | Val | Trp | Ser | Arg | Ala | Ser | Val | Pro | Phe | Ser | Ala | |
| | | | | 80 | | | | | 85 | | | | | 90 | |
| Trp | Glu | Val | Glu | Val | Gln | Met | Arg | Val | Thr | Gly | Leu | Gly | Arg | Arg | |
| | | | | 95 | | | | | 100 | | | | | 105 | |
| Gly | Ala | Gln | Gly | Met | Ala | Val | Trp | Tyr | Thr | Arg | Gly | Arg | Gly | His | |
| | | | | 110 | | | | | 115 | | | | | 120 | |
| Val | Gly | Ser | Val | Leu | Gly | Gly | Leu | Ala | Ser | Trp | Asp | Gly | Ile | Gly | |
| | | | | 125 | | | | | 130 | | | | | 135 | |
| Ile | Phe | Phe | Asp | Ser | Pro | Ala | Glu | Asp | Thr | Gln | Asp | Ser | Pro | Ala | |
| | | | | 140 | | | | | 145 | | | | | 150 | |
| Ile | Arg | Val | Leu | Ala | Ser | Asp | Gly | His | Ile | Pro | Ser | Glu | Gln | Pro | |
| | | | | 155 | | | | | 160 | | | | | 165 | |
| Gly | Asp | Gly | Ala | Ser | Gln | Gly | Leu | Gly | Ser | Cys | His | Trp | Asp | Phe | |
| | | | | 170 | | | | | 175 | | | | | 180 | |
| Arg | Asn | Arg | Pro | His | Pro | Phe | Arg | Ala | Arg | Ile | Thr | Tyr | Trp | Gly | |
| | | | | 185 | | | | | 190 | | | | | 195 | |
| Gln | Arg | Leu | Arg | Met | Ser | Leu | Asn | Ser | Gly | Leu | Thr | Pro | Ser | Asp | |

| | | | | | |
|-----------------|-----|---------------------|-----|---------------------|-----|
| Pro Gly Glu Phe | 200 | Cys Val Asp Val Gly | 205 | Pro Leu Leu Leu Val | 210 |
| Gly Gly Phe Phe | 215 | Gly Val Ser Ala Ala | 220 | Thr Gly Thr Leu Ala | 225 |
| Glu Asp Pro Thr | 230 | Gly Gln Val Pro Pro | 235 | Gln Pro Phe Leu Glu | 240 |
| Gln Gln Leu Arg | 245 | Leu Ala Arg Gln Leu | 250 | Glu Gly Leu Trp Ala | 255 |
| Leu Gly Leu Gly | 260 | Thr Arg Glu Asp Val | 265 | Thr Pro Lys Ser Asp | 270 |
| Glu Ala Gln Gly | 275 | Glu Gly Glu Arg Leu | 280 | Phe Asp Leu Glu Glu | 285 |
| Leu Gly Arg His | 290 | Arg Arg Ile Leu Gln | 295 | Ala Leu Arg Gly Leu | 300 |
| Lys Gln Leu Ala | 305 | Gln Ala Glu Arg Gln | 310 | Trp Lys Lys Gln Leu | 315 |
| Pro Pro Gly Gln | 320 | Thr Arg Pro Asp Gly | 325 | Gly Trp Ala Leu Asp | 330 |
| Ser Cys Gln Ile | 335 | Pro Ser Thr Pro Gly | 340 | Arg Gly Gly His Leu | 345 |
| Met Ser Leu Asn | 350 | Lys Asp Ser Ala Lys | 355 | Val Gly Ala Leu Leu | 360 |
| Gly Gln Trp Thr | 365 | Leu Leu Gln Ala Leu | 370 | Gln Glu Met Ser Arg | 375 |
| Glu Leu Asn Lys | 380 | Ser Leu Gln Glu Cys | 385 | Leu Ser Thr Gly Ser | 390 |
| Pro Leu Gly Pro | 395 | Ala Pro His Thr Pro | 400 | Arg Ala Leu Gly Ile | 405 |
| Arg Arg Gln Pro | 410 | Leu Pro Ala Ser Met | 415 | Pro Ala | 420 |
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| Leu Leu Leu Asp | 20 | Pro His Ser Pro Glu | 25 | Thr Gly Cys Pro Pro | 30 |
| Arg Arg Phe Glu | 35 | Tyr Lys Leu Ser Phe | 40 | Lys Gly Pro Arg Leu | 45 |
| Leu Pro Gly Ala | 50 | Gly Ile Pro Phe Trp | 55 | Ser His His Gly Asp | 60 |
| Ile Leu Gly Leu | 65 | Glu Glu Val Arg Leu | 70 | Thr Pro Ser Met Arg | 75 |
| Arg Ser Gly Ala | 80 | Val Trp Ser Arg Ala | 85 | Ser Val Pro Phe Ser | 90 |
| Trp Glu Val Glu | 95 | Val Gln Met Arg Val | 100 | Thr Gly Leu Gly Arg | 105 |
| Gly Ala Gln Gly | 110 | Met Ala Val Trp Tyr | 115 | Thr Arg Gly Arg Gly | 120 |
| Val Gly Ser Val | 125 | Leu Gly Gly Leu Ala | 130 | Ser Trp Asp Gly Ile | 135 |
| Ile Phe Phe Asp | 140 | Ser Pro Ala Glu Asp | 145 | Thr Gln Asp Ser Pro | 150 |
| Ile Arg Val Leu | | Ala Ser Asp Gly His | | Ile Pro Ser Glu Gln | Pro |

| | | | | | |
|---------------------|---------------------|---------------------|-----|--|-----|
| | 155 | | 160 | | 165 |
| Gly Asp Gly Ala Ser | Gln Gly Leu Gly Ser | Cys His Trp Asp Phe | | | |
| | 170 | | 175 | | 180 |
| Arg Asn Arg Pro His | Pro Phe Arg Ala Arg | Ile Thr Tyr Trp Gly | | | |
| | 185 | | 190 | | 195 |
| Gln Arg Leu Arg Met | Ser Leu Asn Ser Gly | Leu Thr Pro Ser Asp | | | |
| | 200 | | 205 | | 210 |
| Pro Gly Glu Phe Cys | Val Asp Val Gly Pro | Leu Leu Leu Val Pro | | | |
| | 215 | | 220 | | 225 |
| Gly Gly Phe Phe Gly | Val Ser Ala Ala Thr | Gly Thr Leu Ala Asp | | | |
| | 230 | | 235 | | 240 |
| Asp His Asp Val Leu | Ser Phe Leu Thr Phe | Ser Leu Ser Glu Pro | | | |
| | 245 | | 250 | | 255 |
| Ser Pro Glu Val Pro | Gln Pro Phe Leu | Glu Met Gln Gln Leu | | | |
| | 260 | | 265 | | 270 |
| Arg Leu Ala Arg Gln | Leu Glu Gly Leu Trp | Ala Arg Leu Gly Leu | | | |
| | 275 | | 280 | | 285 |
| Gly Thr Arg Glu Asp | Val Thr Pro Lys Ser | Asp Ser Glu Ala Gln | | | |
| | 290 | | 295 | | 300 |
| Gly Glu Gly Glu Arg | Leu Phe Asp Leu Glu | Glu Thr Leu Gly Arg | | | |
| | 305 | | 310 | | 315 |
| His Arg Arg Ile Leu | Gln Ala Leu Arg Gly | Leu Ser Lys Gln Leu | | | |
| | 320 | | 325 | | 330 |
| Ala Gln Ala Glu Arg | Gln Trp Lys Lys Gln | Leu Gly Pro Pro Gly | | | |
| | 335 | | 340 | | 345 |
| Gln Ala Arg Pro Asp | Gly Gly Trp Ala Leu | Asp Ala Ser Cys Gln | | | |
| | 350 | | 355 | | 360 |
| Ile Pro Ser Thr Pro | Gly Arg Gly Gly His | Leu Ser Met Ser Leu | | | |
| | 365 | | 370 | | 375 |
| Asn Lys Asp Ser Ala | Lys Val Gly Ala Leu | Leu His Gly Gln Trp | | | |
| | 380 | | 385 | | 390 |
| Thr Leu Leu Arg Ala | Leu Gln Glu Met Arg | Gln Glu Leu Asn Lys | | | |
| | 395 | | 400 | | 405 |
| Ser Leu Gln Glu Cys | Leu Ser Thr Gly Ser | Leu Pro Leu Gly Pro | | | |
| | 410 | | 415 | | 420 |
| Ala Pro His Thr Pro | Arg Ala Leu Gly Ile | Leu Arg Arg Gln Pro | | | |
| | 425 | | 430 | | 435 |
| Leu Pro Ala Ser Met | Pro Ala | | | | |
| | 440 | | | | |

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| Gln Lys Tyr Ser Gln Leu Leu Glu Lys Lys Thr Thr Lys Glu Leu | |
| 35 40 45 | |
| Val His Thr Thr Leu Glu Cys Val Lys Lys Asn Met Pro Val Glu | |
| 50 55 60 | |
| Glu Thr Ala Trp Ser Cys Cys Pro Lys Asn Trp Lys Ser Phe Ser | |
| 65 70 75 | |
| Ser Asn Cys Tyr Phe Ile Ser Thr Glu Ser Ala Ser Trp Gln Asp | |
| 80 85 90 | |
| Ser Glu Lys Asp Cys Ala Arg Met Glu Ala His Leu Leu Val Ile | |

| | | | | | |
|-----------------|---------------------|-------------------------|-----|--|-----|
| | 95 | | 100 | | 105 |
| Asn Thr Gln Glu | Glu Gln Asp Phe Ile | Phe Gln Asn Leu Gln Glu | | | |
| | 110 | | 115 | | 120 |
| Glu Ser Ala Tyr | Phe Val Gly Leu Ser | Asp Pro Glu Gly Gln Arg | | | |
| | 125 | | 130 | | 135 |
| His Trp Gln Trp | Val Asp Gln Thr Pro | Tyr Asn Glu Ser Ser Ala | | | |
| | 140 | | 145 | | 150 |
| Phe Trp His Pro | Arg Glu Pro Ser Asp | Pro Asn Glu Arg Cys Val | | | |
| | 155 | | 160 | | 165 |
| Val Leu Asn Phe | Arg Lys Ser Pro Lys | Arg Trp Gly Trp Asn Asp | | | |
| | 170 | | 175 | | 180 |
| Val Asn Cys Leu | Gly Pro Gln Arg Ser | Val Cys Glu Met Met Lys | | | |
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| Ile His Leu | | | | | |

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| Leu Gly Tyr Leu Glu Ala Glu Met Lys Thr Tyr Ser His Arg Thr | |
| | 20 25 30 |
| Met Pro Ser Ala Cys Thr Leu Val Met Cys Ser Ser Val Glu Ser | |
| | 35 40 45 |
| Gly Leu Pro Gly Arg Asp Gly Arg Asp Gly Arg Glu Gly Pro Arg | |
| | 50 55 60 |
| Gly Glu Lys Gly Asp Pro Gly Leu Pro Gly Ala Ala Gly Gln Ala | |
| | 65 70 75 |
| Gly Met Pro Gly Gln Ala Gly Pro Val Gly Pro Lys Gly Asp Asn | |
| | 80 85 90 |
| Gly Ser Val Gly Glu Pro Gly Pro Lys Gly Asp Thr Gly Pro Ser | |
| | 95 100 105 |
| Gly Glu Val Gly Ala Pro Gly Met Gln Gly Ser Ala Gly Ala Arg | |
| | 110 115 120 |
| Gly Leu Ala Gly Pro Lys Gly Glu Arg Gly Val Pro Gly Glu Arg | |
| | 125 130 135 |
| Gly Val Pro Gly Asn Ala Gly Ala Ala Gly Ser Ala Gly Ala Met | |
| | 140 145 150 |
| Gly Pro Gln Gly Ser Pro Gly Ala Arg Gly Pro Pro Gly Leu Lys | |
| | 155 160 165 |
| Gly Asp Lys Gly Ile Pro Gly Asp Lys Gly Ala Lys Gly Glu Ser | |
| | 170 175 180 |
| Gly Leu Pro Asp Val Ala Ser Leu Arg Gln Gln Val Glu Ala Leu | |
| | 185 190 195 |
| Gln Gly Gln Val Gln His Leu Gln Ala Ala Phe Ser Gln Tyr Lys | |
| | 200 205 210 |
| Lys Val Glu Leu Phe Pro Asn Gly Gln Ser Val Gly Glu Lys Ile | |
| | 215 220 225 |
| Phe Lys Thr Ala Gly Phe Val Lys Pro Phe Thr Glu Ala Gln Leu | |
| | 230 235 240 |
| Leu Cys Thr Gln Ala Gly Gly Gln Leu Ala Ser Pro Arg Ser Ala | |
| | 245 250 255 |
| Ala Glu Asn Ala Ala Leu Gln Gln Leu Val Val Ala Lys Asn Glu | |
| | 260 265 270 |
| Ala Ala Phe Leu Ser Met Thr Asp Ser Lys Thr Glu Gly Lys Phe | |

| | | | | | |
|-----------------|---------------------|-------------------------|-----|--|-----|
| | 275 | | 280 | | 285 |
| Thr Tyr Pro Thr | Gly Glu Ser Leu Val | Tyr Ser Asn Trp Ala Pro | | | |
| | 290 | | 295 | | 300 |
| Gly Glu Pro Asn | Asp Asp Gly Gly Ser | Glu Asp Cys Val Glu Ile | | | |
| | 305 | | 310 | | 315 |
| Phe Thr Asn Gly | Lys Trp Asn Asp Arg | Ala Cys Gly Glu Lys Arg | | | |
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| Leu Val Val Cys | Glu Phe | | | | |
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 <213> Homo sapiens

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<400> 19

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| 1 | 5 | 10 | 15 |
| Val Ile Pro Tyr Val | Gly Thr Ile Pro | Gln Leu Asp Pro Gly | |
| | 20 | 25 | 30 |
| Thr Leu Ile Val Ile | Cys Gly His Val | Pro Ser Asp Ala Asp Arg | |
| | 35 | 40 | 45 |
| Phe Gln Val Asp Leu | Gln Asn Gly Ser | Ser Val Lys Pro Arg Ala | |
| | 50 | 55 | 60 |
| Asp Val Ala Phe His | Phe Asn Pro Arg | Phe Lys Arg Ala Gly Cys | |
| | 65 | 70 | 75 |
| Ile Val Cys Asn Thr | Leu Ile Asn Glu | Lys Trp Gly Arg Glu Glu | |
| | 80 | 85 | 90 |
| Ile Thr Tyr Asp Thr | Pro Phe Lys Arg | Glu Lys Ser Phe Glu Ile | |
| | 95 | 100 | 105 |
| Val Ile Met Val Leu | Lys Asp Lys Phe | Gln Val Pro Lys Ser Gly | |
| | 110 | 115 | 120 |
| Thr Pro Gln Leu Ser | Leu Pro Phe Ala | Ala Arg Leu Asn Thr Pro | |
| | 125 | 130 | 135 |
| Met Gly Pro Gly Arg | Thr Val Val Val | Lys Gly Glu Val Asn Ala | |
| | 140 | 145 | 150 |
| Asn Ala Lys Ser Phe | Asn Val Asp Leu | Leu Ala Gly Lys Ser Lys | |
| | 155 | 160 | 165 |
| Asp Ile Ala Leu His | Leu Asn Pro Arg | Leu Asn Ile Lys Ala Phe | |
| | 170 | 175 | 180 |
| Val Arg Asn Ser Phe | Leu Gln Glu Ser | Trp Gly Glu Glu Glu Arg | |
| | 185 | 190 | 195 |
| Asn Ile Thr Ser Phe | Pro Phe Ser Pro | Gly Met Tyr Phe Glu Met | |
| | 200 | 205 | 210 |
| Ile Ile Tyr Cys Asp | Val Arg Glu Phe | Lys Val Ala Val Asn Gly | |
| | 215 | 220 | 225 |
| Val His Ser Leu Glu | Tyr Lys His Arg | Phe Lys Glu Leu Ser Ser | |
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| Ile Asp Thr Leu Glu | Ile Asn Gly Asp | Ile His Leu Leu Glu Val | |
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Arg Ser Trp

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 <213> Homo sapiens

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35 40 45
Tyr Cys Tyr Tyr Phe Asn Glu Asp Pro Glu Thr Trp Val Asp Ala
50 55 60
Asp Leu Tyr Cys Gln Asn Met Asn Ser Gly Asn Leu Val Ser Val
65 70 75
Leu Thr Gln Ala Glu Gly Ala Phe Val Ala Ser Leu Ile Lys Glu
80 85 90
Ser Ser Thr Asp Asp Ser Asn Val Trp Ile Gly Leu His Asp Pro
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125 130

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gtagcaatac acaatcttca tcagaaccag cattgttggg ttcaccctcg ttccagtttg 180
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tgtctgggtcg ccatgggtga aaacacagag ggggatctga actccaacct gctccacgcc 300
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<211> 1123

<212> DNA

<213> Homo sapiens

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<221> misc_feature

<223> Incyte ID No: 7521726CB1

<400> 23

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tgcggtctcc tatcttctgg aagaactctt cgagggaagc ttggaaaaag aatgttatga 180
agaaacctgt gtctatgaag aagcaagaga agtgtttgaa aatgaagtag tcaactgatga 240
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ctcttgccag gacagcatct ggggtctcac ctgcacctgc tcccccggt atgagggcag 360
caactgcgag ctggctaaaa atgaatgtca cccagagcgg actgatgggt gtcaacactt 420
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| ctgcctccca | ggacaggaat | cctacacgtg | cagctgtgct | cagggctaca | ggcttgggtga | 480 |
| ggaccacaaa | cagtgtgtgc | cccacgacca | gtgtgcctgc | gggggtgctga | cctctgagaa | 540 |
| gcgtgcaccg | gatctacagg | acctcccgtg | gcagaacgag | ccaagaccgg | ctgatgatca | 600 |
| agataacgca | cgtccatgtg | acatgcggt | atgacgcgga | cgcgggggag | aatgacctgt | 660 |
| cactgctgga | gctggagtgg | cccatccagt | gcccaggtgc | ggggctcccc | gtgtgcaccc | 720 |
| ctgagaaaga | cttcgctgag | cacctcctca | tcccacgcac | caggggcctc | ctcagcggct | 780 |
| gggcacgcaa | tggcactgac | ctgggcaact | cgctgaccac | gcggcctgtc | acacttgtgg | 840 |
| agggggagga | gtgcgggcag | gtcctgaatg | tgactgtcac | caccaggacc | tactgtgaga | 900 |
| gaagcagcgt | ggcggccatg | cactggatgg | atggaagtgt | ggtcaccaga | gaacacagag | 960 |
| gctcctgggt | tctcacgggg | gtcctgggct | cgcagccagt | aggagggcag | gctcacatgg | 1020 |
| tcctgtgcac | caaggtctcc | aggtactcac | tctggtttaa | acagatcatg | aactaactga | 1080 |
| aactcagcta | gccagaatga | acaacacaa | cgggaagcggg | ata | | 1123 |

<210> 24
 <211> 780
 <212> DNA
 <213> Homo sapiens

<220>
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| tttccatcaa | ggtgcacagc | tgcaagccga | gctgcggagc | ctgaaggaag | ctttcagcaa | 120 |
| ctttctctcg | agcaccctga | cggaggtcca | ggcaatcagc | acccacggag | gcagcgtggg | 180 |
| tgacaagatc | acatccctag | gagccaagct | ggagaaacag | cagcaggacc | tgaaagcaga | 240 |
| tcacgatgcc | ctgctcttcc | atctgaagca | cttccccgtg | gacctgcgct | tcgtggcctg | 300 |
| ccagatggag | ctcctccaca | gcaacggctc | ccaaaggacc | tgctgccccg | tcaactgggt | 360 |
| ggagcaccaa | ggcagctgct | actggttctc | tcactccggg | aaggcctggg | ctgaggcggg | 420 |
| gaagtactgc | cagctggaga | acgcacacct | ggtggtcatc | aactcctggg | aggagcagaa | 480 |
| attcattgta | caacacacga | accccttcaa | tacctggata | ggtctcacgg | acagtgatgg | 540 |
| ctcttggaag | tgggtggatg | gcacagacta | taggcacaa | tacaagaact | gggctgtcac | 600 |
| tcagccagat | aattggcacg | ggcacgagct | gggtggaagt | gaagactgtg | ttgaagtcca | 660 |
| gccggatggc | cgtgggaacg | atgacttctg | cctgcagggt | taccgctggg | tggtgtggaa | 720 |
| aaggcggaat | gccaccggcg | aggtggcctg | acccacgac | acctctggct | aaccataca | 780 |

<210> 25
 <211> 1418
 <212> DNA
 <213> Homo sapiens

<220>
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| ggagccctca | gtattttctc | cggcctccaa | agcaaacgac | gttctggtga | ggtggaagcg | 120 |
| tgcggtctcc | tatcttcttg | aagaactctt | cgagggaac | ttggaaaaag | aatgttatga | 180 |
| agaaatctgt | gtctatgaag | aagcaagaga | agtgtttgaa | aatgaagtag | tactgatga | 240 |
| attctggaga | cgatataagg | gtaagtgggt | tccttcgtct | cctcagaagt | attaattcct | 300 |
| cggtatgagg | tgctgtgggtg | ggcttaggac | gcttcacgac | cccagctcag | cggatgccaa | 360 |
| gcctctgggt | ccaggaccca | cggtgtctct | ccagggaagg | gcagctccga | ctctcccca | 420 |
| ggaccaggcg | gctccccgtg | catctcccag | ccctgcctcc | acaacggctc | ttgccaggac | 480 |
| agcatctggg | gctacacctg | cacctgctcc | ccggctatg | agggcagcaa | ctgcgagctg | 540 |
| gctaaaaatg | aatgtcaccc | agagcggact | gatgggtgtc | aacacttctg | cctcccagga | 600 |
| caggaatcct | acacgtgcag | ctgtgtcag | ggctacaggc | ttggtgagga | ccacaaacag | 660 |
| tgtgtgcccc | acgaccagtg | tgctgtcggg | gtgtgacct | ctgagaagcg | tgcaccggat | 720 |
| ctacaggacc | tcccgtggca | gtaaaagtta | acaaattccg | aaggaaaaaga | cttctgtggt | 780 |
| gggtttataa | tacgggaaaa | ttttgtactg | acaacagcaa | aatgttcaact | gttacacagg | 840 |
| aatattactg | taaaaacata | ttttaacaga | acgagccaag | acccgctgat | gatcaagata | 900 |
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| | | | | | | |
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| aaagacttcg | ctgagcacct | cctcatccca | cgcaccaggg | gcctcctcag | cggctgggca | 1080 |
| cgcaatggca | ctgacctggg | caactcgctg | accacgcggc | ctgtcacact | tgtggagggg | 1140 |
| gaggagtgcg | ggcaggtcct | gaatgtgact | gtcaccacca | ggacctactg | tgagagaagc | 1200 |
| agcgtggcgg | ccatgcactg | gatggatgga | agtgtgggtca | ccagagaaca | cagaggctcc | 1260 |
| tggttttctca | cgggggtcct | gggctcgag | ccagtaggag | ggcagggtca | catggctcct | 1320 |
| gtcaccagg | tctccaggta | ctcactctgg | tttaaacaga | tcatgaacta | actgaaactc | 1380 |
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 <212> DNA
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<220>
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| tcctgcttct | tggcatttta | gcatatctcc | agtaggggtg | cctcgaattc | tgaataccaa | 120 |
| tttacgccaa | attatggtea | ttagtgctct | ggctgctgct | gtttcacttt | tatatatttc | 180 |
| tgtgtgcata | atccgaaata | agtatgggcg | actaaccaga | gacaagaaat | ttcaaaggta | 240 |
| cctggcacga | gttaccgaca | ttgaagctac | agacaccaat | aaccccaatg | tgagctatgg | 300 |
| gatcgtggtg | gactgtggta | gcagtgggtc | tcgagtattt | gtttactgct | ggccaaggca | 360 |
| taatggcaat | ccacatgatc | tgttggatat | caggcaaatg | agggataaaa | accgaaagcc | 420 |
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| agagacacct | ctctacattc | tctgcacggc | tggaaatgaga | atcctccccg | aaagccagca | 600 |
| gaaagctatt | ctggaagacc | ttctgaccga | tatccccgtg | cactttgact | ttctgttttc | 660 |
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| tcgagtctat | gtggccacgt | ttcttgggtt | tgggtggcaat | gctgtctgac | agagatacga | 1020 |
| agacagaata | tttgccaaca | ccattcaaaa | gaacaggctc | ctgggtaaac | agactgggtct | 1080 |
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| gcaaaatgga | caaaccatat | acctacgagg | gactggagac | tttgacctgt | gtcgagagac | 1200 |
| tatccagcct | ttcatgaata | aaacaaacga | gacccagact | tccctcaatg | gggtctacca | 1260 |
| gcccccaatt | cacttccaga | acagtgaatt | ctatggcttc | tccgaattct | actactgcac | 1320 |
| cgaggatgtg | ttacgaatgg | ggggagacta | caatgctgct | aaatttacta | aagctgcaaa | 1380 |
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| gcccctgccc | caaggctgcc | cacagaggga | aggattgtgt | gtgtgtgtgt | gtgtgtgcca | 1620 |
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| aaaagcttaa | agactgcctt | gcaagtttac | gacaaggagg | ttcagtggtg | ccttgaggcc | 1800 |
| atcctctaca | ggaccgcgtt | tctaccatta | agagacatcc | agcaggaggc | cttccgagcc | 1860 |
| agtcacaccc | actggcgggg | cgtttccctt | gtctacaacc | actacctgtt | ctctggctgc | 1920 |
| ttcctggtag | tgctgctggc | catcctgctg | tacctgctgc | ggetgcggcg | catccacagg | 1980 |
| cgcactcccc | ggagcagctc | ggccgcggcc | ctctggatgg | aggagggcct | tcccgcgccg | 2040 |
| aatgccccag | ggaccttggt | atccagctca | cagcta | | | 2076 |

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<220>
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ccaacaatag cgggaatgaa gactgtgcgg aatttagtgg cagtggctgg aacgacaatc 720
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aga

```

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<210> 28
<211> 1115
<212> DNA
<213> Homo sapiens

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<220>
<221> misc_feature
<223> Incyte ID No: 7524936CB1

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<400> 28
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ctctacagtg tccaaggtcc ccagctccct aagtccaggaa caatccgagc aagacgcaat 180
ctaccagaac ctgacccagc ttaaagctgc agtgggtgag ctctcagaga aatccaagct 240
gcaggagatc taccaggagc tgacccagct gaaggctgca gtgggtgagt tgccagagaa 300
atccaagctg caggagatct accaggagct gacccgctg aaggctgcag tgggtgagtt 360
gccagagaaa tccaagctgc aggagatcta ccaggagctg acccggtga aggtgcagt 420
gggtgagttg ccagagaaat ccaagctgca ggagatctac caggagctga cccggctgaa 480
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cagctggaag cagctgaagg ctgcagtggt tgagttgcca gaccagtcca agcagcagca 660
aatctatcaa gaactgaccg atttgaagac tgcatttgaa cgctgtgcc gccactgtcc 720
caaggactgg acattcttcc aaggaaactg ttacttcatg tctaactccc agcggaaactg 780
gcacgactcc gtcaccgcct gccaggaagt gagggccag ctgctcgtaa tcaaaaactgc 840
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cagcttccag cggtagtgga acagtggaga acccaacaat agcgggaatg aagactgtgc 1020
ggaatttagt ggcagtggtt ggaacgacaa tcgatgtgac gttgacaatt actggatctg 1080
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1115

```

```

<210> 29
<211> 528
<212> DNA
<213> Homo sapiens

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<220>
<221> misc_feature
<223> Incyte ID No: 7512039CB1

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<400> 29
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agaggatgct tctcttccca aatgttctta tggactgttg ctgggatccc catcctattt 180
ctcagtgcct gtttcatcac cagatgtggt gtgacatttc gcatctttca aacctgtgat 240
gagaaaaagt ttcagctacc tgagaatttc acagagctct cctgctacaa ttatggatca 300
gcttctggga tgtaggggag cccaacaaca tagctaccct ggaggactgt gccaccatga 360
gagactcttc aaaccaagg caaaattgga atgatgtaac ctgtttcttc aattattttt 420

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ggatttgtga aatggtagga ataaatcctt tgaacaaagg aaaatctctt taagaacaga 480
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<210> 30
 <211> 1365
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <223> Incyte ID No: 7512576CB1

<400> 30
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 cagcttcaaa ggcccaaggc tggcattgcc tggggctgga atacccttct ggagccatca 180
 tggagacgcc atcctggggc tggaggaagt gcggctgacg ccatccatga ggaaccggag 240
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 caggggcccag gtaggctctg tcttggggg gctggcctcg tgggacggca tcgggatctt 420
 ctttgactct ccggcagagg atactcagga cagtccctgc atccgtgtgc tggccagcga 480
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 gtcttctctg accttcagcc tgagttagcc cagcccagag gttccccctc agcccttctt 720
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 cccaggggcc ctggggatc tgatgaggca gcctctccct gccagcatgc ctgcctgacc 1260
 cacctcagag cctgctttgc atcactggga agcaggcagt gtcttgggtg ggggcttggg 1320
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<210> 31
 <211> 1343
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <223> Incyte ID No: 7514864CB1

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 atcaccccg cgccttccgg ggacgtagcc gccacattcc agttccgcac gcgctgggat 180
 tcggagcttc agcgggaagg aggcctctct gtgctgctga aggagatcg cttgttccac 240
 accagctacc actcccaggc agtgcatatc cgccctgttt gcagaaatgc acgctgtact 300
 agcatctcct gggagctgag gcagaccctg tcagtgtgat ttgatgcctt catcgcgggg 360
 cagggaaga aagactggtc cctcttccgg atgttctccc gaaccctcac ggagccctgc 420
 cccctggctt cagagagccg agtctatgtg gacatcacca cctacaacca ggacaacgag 480
 acattagagg tgcacccacc cccgaccact acatatcagg acgtcatcct aggcactcgg 540
 aagacctatg ccatctatga cttgtctgac accgcatga tcaacaactc tcgaaacctc 600
 aacatccagc tcaagtggaa gagaccccca gagaatgagg ccccccaggt gcccttctctg 660
 cgtgccagc ggtacgtgag tggctatggg ctgcagaagg gggagctgag cacactgctg 720
 tacaacaccc acccataccg ggccttcccc gtgctgctgc tggacaccgt accctggtat 780
 ctgcggctgt atgtgcacac cctcaccatc acctccaagg gcaaggagaa caaaccaagt 840
 tacatccact accagcctgc ccaggaccgg ctgcaacccc acctcctgga gatgctgatt 900
 cagctgcggc ccaactcagt caccaagggt tccatccagt ttgagcgggc gctgctgaag 960

| | | | | | | |
|------------|------------|------------|------------|------------|------------|------|
| tggaccgagt | acacgccaga | tectaaccat | ggcttctatg | tcagcccatc | tgctctcagc | 1020 |
| gcccttgtgc | ccagcatggg | agcagccaag | ccagtggact | gggaagagag | tcccctcttc | 1080 |
| aacagcctgt | tcccagtctc | tgatggctct | aactactttg | tgcggtctta | cacggagccg | 1140 |
| ctgctggtga | acctgccgac | accggacttc | agcatgccct | acaacgtgat | ctgcctcacg | 1200 |
| tgcaactgtg | tggccgtgtg | ctacggctcc | ttctacaatc | tcctcaccgc | aaccttccac | 1260 |
| atcgaggagc | cccgcacagg | tggcctggcc | aagcggctgg | ccaaccttat | ccggcgcgcc | 1320 |
| cgagggtgtc | ccccactctg | ata | | | | 1343 |

<210> 32

<211> 1840

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 8266965CB1

<400> 32

| | | | | | | |
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| agcttctacc | cggagctggg | gccctacagc | tcccgggacc | ccgaagtgtc | gcgggagcat | 60 |
| atgacccagc | tcaagggaag | cgccatcggc | gtcttggtcc | tgctctggtg | cccacctggc | 120 |
| atggctgatg | ataacgggga | gccctcagat | gacctgggtc | ccgccattct | ggacaccgcc | 180 |
| catcagtaca | gcatccaggt | ggccttccac | atccaaccct | acaagggccg | ggatgacatc | 240 |
| actgtacatg | acaacatcaa | gtacatcatt | gcacagtatg | gctcccatgg | tgcattttac | 300 |
| cgctataaga | acagcatggg | caagagcctc | ccactctttt | atatctacga | ctcatacctg | 360 |
| acgtcccctg | aggcctgggc | ccacctcctg | acaccaaacg | ggccccattc | gatccgcaac | 420 |
| acgccttacg | atggggctct | catagcgctg | ctggtggagg | agggccacac | ccacgatatc | 480 |
| ctggccgcgc | gatttgacgg | catgtacacc | tactttgcct | ccaatgggtt | ctcctttggt | 540 |
| tcttcccatc | agaactggaa | agctgtgaag | aacttttgtg | atgccaaaca | cctcatgttc | 600 |
| atccccagtg | tggggcctgg | ctacatagac | accagcatte | ggccttgga | caaccacaat | 660 |
| acgcgcaaca | gggtcaatgg | caagtactat | gagacggccc | tgcaggcggc | cctgacagtg | 720 |
| aggcccgaga | tctgttccat | tacctccttc | aatgagtggc | acgagggcac | ccagattgag | 780 |
| aaggccattc | ccaagaagac | acccaccgcg | ctgtatttgg | actacctgcc | tcaccagccc | 840 |
| agcctgtacc | tggagctgac | acgcgcgtgg | gcggagcact | tcatacaaga | gaaggagcag | 900 |
| tggctcatgt | gaggggctct | taaatgggcg | tgaggtgctg | atgtccttgc | cttgctggaa | 960 |
| gatgtcacca | tgtgggggtt | agctgaggtt | gtagccactc | actcgttccc | aggtcagagg | 1020 |
| tcagcagatg | gggtgttctg | gggtggccgt | caggcatggg | cctgtgcaac | acagagcccg | 1080 |
| ttcctcaggc | gagtggtgct | gaggtgctct | gtgggtgatg | gaacggcaga | ggctggcagg | 1140 |
| tgactgaact | tagcccaggg | cagctccaca | tcctgggaac | actttcatgt | aacccttctt | 1200 |
| agttttgaac | tctgcagcag | gctgggtgct | tgtagtgggc | acccagtcac | cacccttgga | 1260 |
| agggtgtcag | ggctctgggt | cgcctgcacc | ctgtccctt | ctgccagcct | gcactctctc | 1320 |
| ctcaggcctc | cttcccacat | catctgtctt | ctctaagtta | gggaaccata | tttgagactt | 1380 |
| tcaaaaaggg | aacttctagg | tttaagctcc | tcccagtaga | ttcctgaacc | caattatcag | 1440 |
| gaaatcatcc | tgagcactca | caggttcatt | taacactcac | tcataagca | ccttcctatg | 1500 |
| tgctaggtgc | tggggaaaac | ttgaccaagg | aagagtccct | gtcctgaagc | ttccaggacc | 1560 |
| cagctttcct | tttctggtgt | ggccttgtag | ctagtgcctg | ggcacagggt | tttttctttt | 1620 |
| tgcagtttta | cctagtgtct | ggagttcagt | tctttttcct | ctagaaaaat | acctctgtgc | 1680 |
| tccagagcct | aatttttccc | agatgcatat | ttagctctag | ggagaggact | aggaggaaat | 1740 |
| ccccctcctt | ttagctgcct | gaactgactg | aggcccactc | actagagcca | tggtcagtg | 1800 |
| tactgtgatt | agtagtaatt | aaatatgaac | tggtattctc | | | 1840 |

<210> 33

<211> 523

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 7515124CB1

<400> 33

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| agagccagat | cgtcatcatg | tctgcattgt | ggctgtgtgt | gggcctcctt | gccctgatgg | 60 |
| gagttcgtgc | ttctgaaagg | ctggctgaaa | tagacatgcc | atacctcctg | aaatatcaac | 120 |
| ccatgatgca | aaccattggc | caaaaagtact | gcattggatcc | tgccgtgatc | gctggtgtct | 180 |

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| tgtccaggaa | gtctcccgg | gacaaaattc | tggtcaacat | gggcatagg | actagcatgg | 240 |
| tgaggaccc | tggtctctaa | gctcccacat | cctggattag | tgagtctcag | gtttcccaga | 300 |
| caactgaagt | tctgactact | agaatcaaag | aaatccagag | gaggtttcca | acctggaccc | 360 |
| ctgaccagta | cctgagaggt | ggactctgtg | cctacagtgg | gggtgctggc | tatgtccgaa | 420 |
| gcagccagga | cctgagctgt | gacttctgca | atgatgtcct | tgacagagcc | aagtacctca | 480 |
| agagacatgg | cttctaacat | ctcagatgaa | acccaagacc | ata | | 523 |

<210> 34
 <211> 924
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <223> Incyte ID No: 7514570CB1

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| tatgcatgac | agtaacaatg | tggagaaaga | cattacacca | tctgaattgc | ctgcaaacc | 60 |
| agcaataaga | gctaactgcc | atcaagagcc | atcagtatgt | cttcaagctg | catgcccaga | 120 |
| aagctggatt | ggttttcaaa | gaaagtgttt | ctatttttct | gatgacacca | agaactggac | 180 |
| atcaagtcag | aggttttgtg | actcacaaga | tgctgatctt | gctcagggtg | aaagcttcca | 240 |
| ggaactgaat | ttcctgttga | gatataaagg | cccatctgat | cactggattg | ggctgagcag | 300 |
| agaacaaggc | caaccatgga | aatggataaa | tggtactgaa | tggaacaagac | agtttcctat | 360 |
| cctgggagca | ggagagtgtg | cctatttgaa | tgacaaaggt | gccagtagtg | ccaggcacta | 420 |
| cacagagagg | aagtggattt | gttcctaaatc | agatatacat | gtctagatgt | tacagcaaag | 480 |
| ccccactaa | tctttagaag | catattggaa | ctgataactc | cattttaaaa | tgagcaaaga | 540 |
| atttatttct | tataccaaca | ggtatatgaa | aatatgctca | atatcactaa | taactgggaa | 600 |
| aatacaaatc | aaaatcatag | taaaatatta | cctgttttca | tggtgcta | attacctgtt | 660 |
| ctcccactgc | taatgacata | cccagagctg | agtaatttat | aaataaaaga | gatttaattg | 720 |
| actcatagtt | ccacatggct | ggggaggtct | tgcaatcatg | acagaaggca | aatgggaagc | 780 |
| aaagtcatgt | cttatgtggt | ggcaggcagg | gggacttggt | cacaggaact | cctatttata | 840 |
| caaccatcag | atatcttgag | acaagaacag | tatggggctc | cctggtgtga | ttcgcgtcctg | 900 |
| cgcggtgtgt | ctctggagca | gcat | | | | 924 |

<210> 35
 <211> 1346
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <223> Incyte ID No: 7515114CB1

| | | | | | | |
|------------|-------------|-------------|-------------|-------------|-------------|------|
| <400> 35 | | | | | | |
| tagacttcag | gcgccttcac | gatgccggcg | gtcagtggtc | caggctccctt | attctgcctt | 60 |
| ctcctcctgc | tcttgaccc | ccacagccct | gagacggggt | gtcctcctct | acgcaggttt | 120 |
| gagtacaagc | tcagcttcaa | aggcccaagg | ctggcattgc | ctggggctgg | aatacccttc | 180 |
| tggagccatc | atggagacgc | catcctgggc | ctggagggaag | tgcggtgac | gccatccatg | 240 |
| aggaaccgga | gtggcgccgt | gtggagcagg | gcctctgtcc | ccttctctgc | ctgggaagta | 300 |
| gaggtgcaga | tgagggtgac | gggactgggg | cgccggggag | cccagggcat | ggccgtgtgg | 360 |
| tacaccgggg | gcagggggcca | tgtaggctct | gtccttgggg | ggctggcttc | gtgggacggc | 420 |
| atcgggatct | tctttgactc | tccggcagag | gatactcagg | acagtccctgc | catccgtgtg | 480 |
| ctggccagcg | acgggcacat | cccctctgag | cagcctgggg | atggagctag | ccaagggctg | 540 |
| ggctcctgtc | attgggactt | ccggaaccgg | ccacaccctc | tcagagcacg | gatcacctac | 600 |
| tgggggcaga | ggctgcgcat | gtccttgaac | agtggcctca | ctcccagtg | tccaggtgag | 660 |
| ttctgtgtgg | atgtggggcc | cctgcttttg | gtccttggag | gtttcttttg | ggtctcagca | 720 |
| gccaccggca | ccctggcagg | tgaggatccc | actggacagg | ttccccctca | gcccttctctg | 780 |
| gagatgcagc | agctccgcct | ggcgaggcag | ctggaagggc | tgtgggcaag | gctgggcttg | 840 |
| ggcaccaggg | aggatgtaac | tccaaaatca | gactctgaag | ctcaaggaga | aggggaaagg | 900 |
| ctctttgacc | tggaggagac | gctgggcaga | caccggccga | tcctgcaggc | tctgcggggt | 960 |
| ctctccaagc | agctggccca | ggctgagaga | caatggaaga | agcagctggg | gcccccaggc | 1020 |
| caaaccaggc | ctgacggagg | ctgggcccctg | gatgcttctc | gccagattcc | atccacccca | 1080 |
| gggaggggtg | gccacctctc | catgtcactc | aataaggact | ctgccaagggt | cgggtgccctg | 1140 |


```
ctccatggac agtggactct gctccaggcc ctgcaagaga tgagcaggca ggagctgaac 1200
aagagccttc aggagtgtct gtccacaggc agccttcctc tgggtcctgc accacacacc 1260
cccagggccc tggggattct gaggaggcag cctctccctg ccagcatgcc tgcctgaccc 1320
acctcagagc ctgctttgca tacta 1346
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<210> 36
<211> 1379
<212> DNA
<213> Homo sapiens
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<220>
<221> misc_feature
<223> Incyte ID No: 7515136CB1
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gagtacaagc tcagcttcaa aggcccaagg ctggcattgc ctggggctgg aatacccttc 180
tggagccatc atggagacgc catcctgggc ctggaggaag tgcggctgac gccatccatg 240
aggaaccgga gtggcgccgt gtggagcagg gcctctgtcc ccttctctgc ctgggaagta 300
gaggtgcaga tgaggggtgac gggactgggg cgccggggag cccagggcat ggccgtgtgg 360
tacaccgggg gcagggggcca tgtaggctct gtccttgggg ggctggcttc gtgggacggc 420
atcgggatct tctttgactc tccggcagag gatactcagg acagtctgc catccgtgtg 480
ctggccacgc acgggcacat cccctctgag cagcctgggg atggagctag ccaagggctg 540
ggctcctgtc attgggactt ccggaaccgg ccacaccctc tcagagcacg gatcacctac 600
tgggggcaga ggctgcgcat gtccttgaac agtggcctca ctcccagtga tccaggtgag 660
ttctgtgtgg atgtggggcc cctgcttttg gtccttggag gtttctttgg ggtctcagca 720
gccaccggca ccctggcaga tgatcatgat gtcctgtcct tcctgacctt cagcctgagt 780
gagccacagc cagaggttcc cctcagccc ttcttgaga tgcagcagct ccgcctggcg 840
aggcagctgg aagggtctgt ggcaaggctg ggcttgggca ccagggagga tgaactcca 900
aaatcagact ctgaagctca aggagaaggg gaaaggctct ttgacctgga ggagacgctg 960
ggcagacacc gccggatcct gcaggctctg cggggtctct ccaagcagct ggcccaggct 1020
gagagacaat ggaagaagca gctggggccc ccaggccaag ccaggcctga cggaggctgg 1080
gccctggatg aatcctgcca gattccatcc accccaggga ggggtggcca cctctccatg 1140
tactcaata aggactctgc caaggctcgt gccctgctcc atggacagtg gactctgctc 1200
cgggccctgc aagagatgag gcaggagctg aacaagagcc ttcaggagtg tctgtccaca 1260
ggcagccttc ctctgggtcc tgcaccacac acccccaggg ccctggggat tctgaggagg 1320
cagcctctcc ctgccagcat gcctgcttga cccacctcag agcctgcttt gcatactta 1379
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<210> 37
<211> 999
<212> DNA
<213> Homo sapiens
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<220>
<221> misc_feature
<223> Incyte ID No: 7515308CB1
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<400> 37
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cctcttctgc agttttcttt caaaaatatt ctgagcttct tgaaaaaag actacaaaag 180
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<212> DNA
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